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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,052	11/28/2001	Michael D. Ellis	UV-225	1252

1473 7590 05/11/2007  
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EXAMINER
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SALCE, JASON P

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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05/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/996,052	<b>Applicant(s)</b> ELLIS ET AL.	
	<b>Examiner</b> Jason P. Salce	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31, 46-76 and 91-121 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31, 46-76 and 91-121 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 2/12/2007 have been fully considered but they are not persuasive.

The examiner notes that the amended claims still read on the Alexander prior art reference of record (see rejection below).

### ***Election/Restrictions***

2. Applicant's election without traverse of Species I in the reply filed on 6/29/2006 is acknowledged.

Claims 32-45, 77-90 and 122-135 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/29/2006.

The requirement is deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 2623

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-9, 11-15, 17-25, 27-30, 46-48, 50-54, 56-60, 62-70, 72-75, 91-93, 95-99, 101-105, 107-115 and 116-120 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Alexander et al. (U.S. Patent No. 6,177,931).

Referring to claim 1, Alexander discloses implementing an interactive television application using user equipment to provide interactive services to a user (see Figure 1 for implementing an EPG on a television receiver to provide interactive services (see Column 3, Lines 1-55)).

Alexander also discloses selectively enabling a subset of research criteria from a plurality of research criteria (see Column 28, Lines 22-29 for creating a subset of research criteria based on a individual viewer or subset of viewers).

Alexander also discloses generating an individual data record for each one of a series of discrete acts that 1) occurred (see Column 28, Line 11 through Column 29, Line 11) to interface the user and the interactive television application (see Column 29, Lines 56-60) and, 2) meets the subset of research criteria (see again Column 28, Lines 22-29 for collecting profile information based on which viewer of subset of viewers (family) are interacting with the EPG).

Alexander also discloses screening the data records based on the enabled subset of research criteria (see Column 29, Lines 36-37 for performing statistical analysis on the collected profile information).

Alexander also discloses processing the screened data records to determine quality measures of the interactive services based on the usage patterns (see Column 29, Line 29 through Column 30, Line 37).

Referring to claim 2, Alexander discloses implementing a data collection application to generate the data records (see Column 28, Lines 30-34).

Referring to claim 3, Alexander discloses providing the user equipment to include a set-top box (see Column 3, Lines 24-25).

Referring to claim 5, Alexander discloses sending the individual data records to a central facility (see Column 29, Lines 14-34).

Referring to claim 6, Alexander discloses screening the generated data records to filter out some of the records (see Column 30, Lines 51-53).

Referring to claim 7, Alexander discloses processing the individual data records to capture information from the data records (see Column 29, Lines 56-60).

Referring to claim 8, Alexander discloses generating the data records to include one set of data records for identifying parameters for a user profile (see Column 28, Lines 30-52).

Alexander also discloses generating the data records to also include another set of data records (see Column 28, Lines 30-52 for capturing multiple types of interactions, therefore teaching another set of data records).

Referring to claim 9, Alexander discloses generating data records to include one set of data records for determining where to place interactive advertisements (see Column 32, Lines 22-34).

Alexander also discloses generating the data records to also include another set of data records (see Column 28, Lines 30-52 for capturing multiple types of interactions, therefore teaching another set of data records).

Referring to claim 11, Alexander discloses that the data records are generated for discrete acts that mark changes in an application flow of the interactive television application (see Column 28, Lines 30-52 and Column 30, Lines 47-51).

Referring to claim 12, Alexander discloses that the interactive television application is an interactive television program guide application (see Figure 1).

Referring to claim 13, Alexander discloses implementing a storage device that stores the data records (see Column 28, Lines 30-52 for recording/storing EPG records).

Alexander also discloses providing a conversion device for converting signals carrying the data records between the user equipment and the storage device (see Column 29, Lines 14-34 for transmitting the records from the client device to the head end). The examiner notes that in order to transmit any type of data from a set-top box to a cable head end through a television or phone network, the signal must be properly modulated to the correct frequency in order to be transmitted on the correct upstream path, therefore any transmission from a client device to a head end, over a network, requires a conversion device for converting/modulating signals to an upstream return path.

Referring to claim 14, Alexander discloses generating a data field in the data records for a time at which a particular act occurred (see Column 28, Lines 30-59).

Referring to claim 15, Alexander discloses generating a user input data record when the user presses a key on a user input device (see Column 28, Lines 30-59).

Referring to claim 17, Alexander discloses generating a state change data record when the interactive television application changes states (see Column 28, Lines 30-59).

Referring to claim 18, Alexander discloses generating a channel change data record when the user changes channels (see Column 28, Lines 30-59).

Referring to claim 19, Alexander discloses generating an ad display record when an advertisement is displayed by the interactive television application (see Column 28, Lines 30-59).

Referring to claim 20, Alexander discloses generating an information display data record when an information display screen is displayed (see Column 28, Lines 30-59).

Referring to claim 21, Alexander discloses generating a highlight data record when a highlight window is positioned on an item in a display screen (see Column 28, Lines 30-59).

Referring to claim 22, Alexander discloses a parental lock data record when a parental control feature is selected (see Column 29, Lines 39-41 and Column 17, Lines 13-36).

Referring to claim 23, Alexander discloses a favorite channel data record when a favorite channel option is selected (see Column 28, Lines 30-59).

Referring to claim 24, Alexander discloses a setup option data record when a user changes setup options (see the rejection of claim 22).



Referring to claim 25, Alexander discloses a reset database record when a database of the interactive television application is reset (see Column 29, Lines 22-30 for resetting the database everytime the profile information is transmitted to the headend and therefore reset).

Referring to claim 27, Alexander discloses a current status data record to identify a current status of the interactive television application (see Column 28, Lines 30-59).

Referring to claim 28, Alexander discloses generating the data records for automatic and manual acts that occurred to interface the user and the interactive television application (see Column 28, Lines 30-59).

Referring to claim 29, Alexander discloses aggregating certain individual data records to form other data records (see Column 29, Lines 22-30).

Referring to claim 30, Alexander discloses screening the generated data records to reduce the amount of data (see Column 29, Lines 22-30).

Referring to claims, 46-48, 50-54, 56-60, 62-70 and 72-75, see the rejection of claims 1-3, 5-9, 11-15, 17-25 and 27-30, respectively.

Referring to claims 91-93, 95-99, 101-105, 107-115 and 116-120, see the rejection of claims 1-3, 5-9, 11-15, 17-25 and 27-30, respectively.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 10, 16, 26, 31, 49, 55, 61, 71, 76, 94, 100, 106, 116 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al. (U.S. Patent No. 6,177,931).

Referring to claim 4, Alexander discloses implementing a data collection application to generate the data records on a plurality of user equipment in different households (see Column 30, Lines 38-44).

Although Alexander teaches receiving the viewer's interactions with the EPG periodically during specified time intervals (see Column 29, Lines 14-30), Alexander fails to disclose selectively enabling a subset of the data collection applications.

The examiner takes Official Notice to the fact that only a subset of user may be notified to respond to a headend with his/her viewer profile.

At the time the invention made, it would have been obvious to a person of ordinary skill in the art, to modify the viewer profile data collection system, as taught by Alexander, to include the selective viewer profile reporting functionality, for the purpose

Art Unit: 2623

of only updating the user profiles that require updating, thereby conserving processing power at the central processing facility (headend).

Referring to claim 10, Alexander teaches all of the limitations of claim 1, but fails to disclose that the data records are in a format that is compatible with conventional database applications.

The examiner takes Official Notice to the fact that conventional databases such as Oracle or SQL can be used to process and manage EPG and viewer profile data.

At the time the invention made, it would have been obvious to a person of ordinary skill in the art, to modify the viewer profile data collection system, as taught by Alexander, to include the conventional database software, for the purpose of allowing user to process data using powerful database tools that allow more details method of managing data, thereby providing more organized and efficient means for processing the viewer profile data.

Referring to claim 16, Alexander discloses all of the limitations in claim 1, as well as recording every user interaction (see Column 29, Lines 39-41), but fails to teach generating a turbo key data record when the user holds a key on the a user input device to repeat the key entry.

The examiner takes Official Notice to the fact of a turbo key function.

At the time the invention made, it would have been obvious to a person of ordinary skill in the art, to modify the remote control functionality, as taught by

Art Unit: 2623

Alexander, to include turbo key functionality, for the purpose of providing more detailed interaction information to the headend in order to determine which television program channels (favorite channel list) to provide to a viewer.

Referring to claim 26, Alexander discloses all of the limitations of claim 1, but fails to disclose an identification data record to identify a software version of the interactive television application.

The examiner takes Official Notice to the fact of notifying a headend which version of EPG software the client device is running.

At the time the invention made, it would have been obvious to a person of ordinary skill in the art, to modify the viewer profile data collection system, as taught by Alexander, to include the software version of the client device, for the purpose of sending back the proper version of preferred viewer information to the client device in order for a client device to be able to properly process the viewer information on the specific manufacturer version of the client device.

Referring to claim 31, Alexander discloses all of the limitations in claim 1, but fails to teach screening the generated data records according to their position in memory to filter out some of the records.

The examiner takes Official Notice to the fact of performing garbage collection on old data records stored in a database (in a television profiling system).

Art Unit: 2623

At the time the invention made, it would have been obvious to a person of ordinary skill in the art, to modify the viewer profile data collection system, as taught by Alexander, to include the data record memory filtering functionality, for the purpose of assuring that old data records that are no longer useful to the viewer are purged from memory so that a memory overflow does not occur.

Referring to claims 49, 55, 61, 71 and 76, see the rejection of claims 4, 10, 16, 26 and 31, respectively.

Referring to claims 94, 100, 106, 116, 121, see the rejection of claims 4, 10, 16, 26 and 31, respectively.

### ***Conclusion***

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2623

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

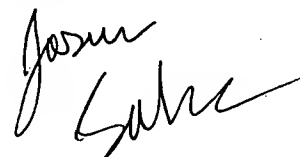
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Salce  
Primary Examiner  
Art Unit 2623

May 7, 2007

JASON SALCE  
PRIMARY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Jason Salce', is written over the printed name and title.